

The Mask Tightening Strap

BACKGROUND OF THE INVENTION

(a) Field of the Invention

The present invention relates to face masks used for diving and snorkeling, and more particularly to a mask strap cover. The strap cover consists of a hollowed-out section for a snorkel's retaining ring. The snorkel can be adjusted within the hollowed-out section, along the strap, to allow it to be angled at the most comfortable position. The strap cover also prevents the likelihood that the diver's face will be scratched, scraped or injured during the adjustment.

(b) Description of the Prior Art

A diver's mask typically incorporates a strap, connected to the mask frame, which is tightened to bring the mask closer to the diver's face preventing water to enter the mask during use. FIG. 1 shows a conventional mask with a strap 200 and 201 connected to the frame 100. A snorkel 400, the predominant form of a breathing tube, is used with the mask and may be clasped onto the mask strap 201 via a retaining ring 300 to prevent the top of the snorkel from falling into the water during use. The conventional method is to have the ends of the strap 200 and 201 loop through slots located along the edges of the mask frame 100, allowing the mask to be adjusted along both sides. This type of side adjustment method has its many disadvantages. First, the diver is required to bring both his hands to one side of his head to make the adjustment, and can only adjust one side at a time. If the mask is on his head, the adjustment process is awkward, because the diver needs to tilt his head to the right or the left, depending on

which side the adjustment is being made. Trying to make the adjustment before putting the mask on can require numerous trial-error attempts, because straps normally are evenly proportioned and the right adjustment cannot be felt unless the mask is on the diver's head. The more suitable faster method, which is provided here, is an adjustment 500 that is located at the back-of-the-head (see FIGS. 2 and 4), allowing the diver to bring both hands over the top of his head in a more coherent motion, to tighten or loosen the mask. The dual-simultaneous back adjustment does not require two steps to adjust the mask, but rather the two ends of the straps can be pulled outward to adjust both strap sides. The back adjustment is usually done while the mask is on, allowing the fit to be made and felt immediately, and can be made comfortable with an arched shape for the back of the diver's head as provided. Regardless of which type of adjustment is used, the strap 200, with or without the back adjustment 500, when used with the retaining ring 300 can present the following drawbacks:

1. A hard retaining ring will directly press against the temples or sides of the diver's face, causing discomfort and the potential for adverse skin reactions and injury including bleeding during diving and snorkeling for extended lengths of time and,
2. As the diver during use in the water attempts to adjust the position of the snorkel 400 by moving the retaining ring 300, his face can be scraped and scratched by the hardness or sharp edges of the retaining ring.

SUMMARY OF THE INVENTION

A primary objective of the present invention is to provide a strap cover for a diving mask. The strap cover integrates the use of a snorkel

retaining while protecting the diver's face from the hardness of the retaining ring. The strap cover has a hollowed-out section near the frame of the mask through which a snorkel retaining ring can be attached and moved about to and fro for adjustment during use. The strap cover is made of a soft, or cushiony, material to shield the diver's face from the hard surfaces of the snorkel's retaining ring.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a schematic view of a conventional diving mask.

FIG. 2 shows a schematic view of the present invention with an arc-shaped back-of-the-head adjustment.

FIG. 3 shows a schematic view of the strap cover.

FIG. 4 shows a schematic view of the strap cover with the back-of-the-head adjustment illustrating the hollowed-out sections for the retaining ring and the adjustment.

FIG. 5 shows a partial schematic view of the strap cover.

FIG. 6 shows a fragmentary view of the other end of the strap cover.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIG. 2 shows a diving face mask with the tightening strap of the present invention incorporating an arc-shaped assembled piece 1, two straps 2, two pressure pieces 3, and a frame 4 of the face mask.

The arc-shaped assembled piece 1 has an arc-shaped piece 11 that conforms to the arc-shape of the back of the head of a diver (for comfort during use). The two pressure pieces 3 are located on the central portion on the exterior of the arc-shaped assembled piece 1.

Fastening ends 21 of the two straps 2 are respectively pivotally affixed to each of the two side pieces of the frame 4 of the diving face mask (see FIG. 2), and the free ends 22 of the straps 2 are each threaded through two sides of the arc-shaped assembled piece 1, folding backward along the exterior of the two sides, enabling the free ends 21 to fold backwards. The present invention is primarily characterized in the following way:

FIGS. 2, 3, 4, 5, and 6 show the inner sides of the two straps 2 sleeved within a soft cover 6 having a broad surface (see FIG. 3), in order to completely separate the two straps 2 from the diver's skin. The strap cover 6 has a fastening strap 61 that is located in close proximity to the frame 4. The hollowed-out section 62 is defined by a side, right or left, of the strap cover 6 configured to enable a retaining ring 71 of a snorkel 7 to clasp on the strap 2 through the hollowed-out section 62, allowing the strap cover 6 to completely separate the retaining ring 71 from the diver's skin. Two strap loops 63 and 64 are incorporated onto strap cover 6. The arc-shaped assembled piece 1 is centrally positioned between strap loops 63 and 64 for ease of reaching. FIG. 2 shows the snorkel 7 utilizing the retaining ring 71 clasping onto the strap 2 on the left side of the hollowed-out section section 62, clearly separating the retaining ring 71 from the diver's skin. The strap 2 does not need a snorkel 7 to be clasped onto its right side. Another strap loop 65 on the other side is attached to the strap cover 6 for the strap 2. Another hollowed-out section on the other side of the strap cover 6 is not necessary.

A sewn-on or hook and loop fastening strip can be utilized to affix the fastening strap 61 to the strap cover 6 (see FIG. 6).

A soft rubber or foam rubber pad can be affixed to the inner side of the strap cover 6, and the inner sides of the straps 2 are sleeved within the strap cover 6. The fastening strap 61 is configured near the frame 4 on one end of the strap cover 6.

5 The embodiments described herein is merely illustrative of the principles of the invention and a wide variety of modifications may be effected by persons skilled in the art. The present invention described with reference to the preferred embodiments and set forth in the following claims is manifestly intended to be as broad as possible. For example,
10 unless specifically otherwise noted, the claims reciting a single particular element also encompass a plurality of such particular elements.